

$$f(x) = x^2 + 3$$

$$f(.5) = (.5)^2 + 3$$

$$f(.5) = 3.25$$

$$f(1) = 4$$

$$f(1.5) = (1.5)^2 + 3$$

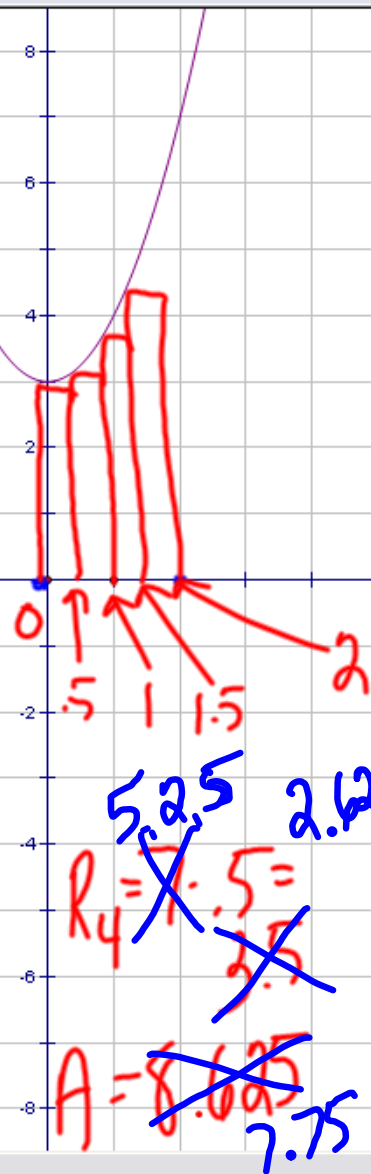
$$f(1.5) = 5.25$$

$$f(2) = 7$$

LRAM

$[0, 2]$

4 rectangles



$$R_1 = 3 \cdot 0.5 = 1.5$$

$$R_2 = 3.25 \cdot 0.5 = 1.625$$

$$R_3 = 4 \cdot 0.5 = 2$$

$$R_4 = 5.25 \cdot 0.5 = 2.625$$

$$A = 8.625$$

$$f(x) = x^2 + 3$$

$$h = .5$$

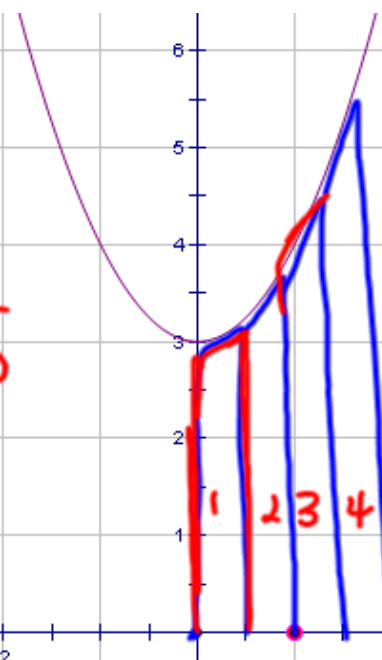
$$A_{T_1} = \frac{1}{2}(3 + 3.25) \cdot .5$$

$$= 1.5625$$

$$A_{T_2} = 1.8125$$

$$A_{T_3} = 2.3125$$

$$A_{T_4} = 3.0625$$



$$A = \frac{1}{2}(b_1 + b_2)h$$

TAM

$$A = 8.75$$



$$f(x) = x^2 + 3$$

$$f(.5) = (.5)^2 + 3$$

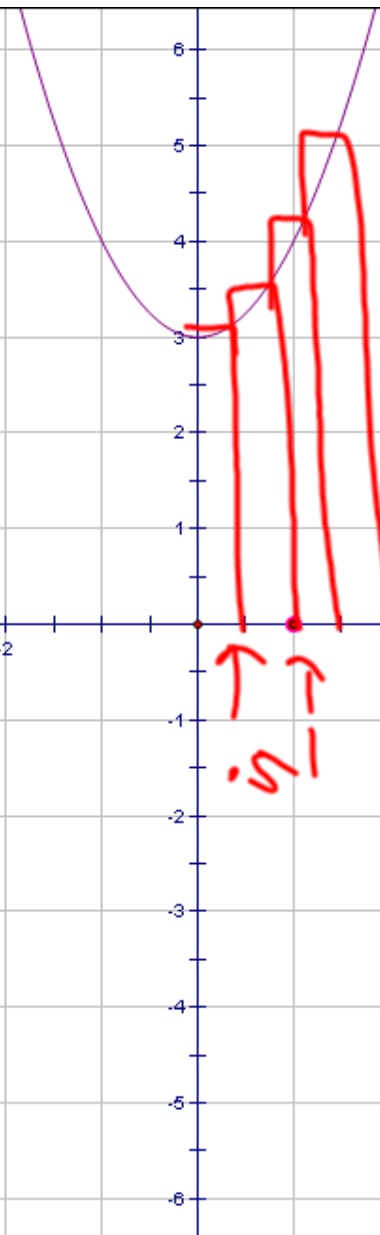
$$f(.5) = 3.25$$

$$f(1) = 4$$

$$f(1.5) = (1.5)^2 + 3$$

$$f(2) = 7$$

$$A = 9.75$$



R R A M

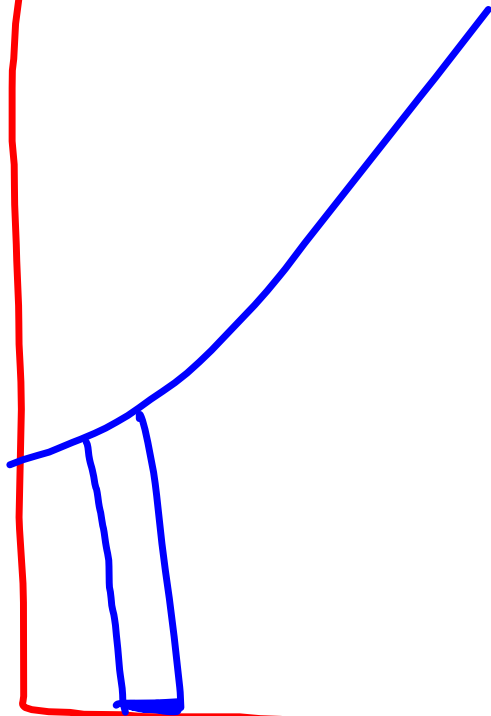
$$1.625 = R_1 = 3.25 \cdot .5$$

$$2 = R_2 = 4 \cdot .5$$

$$2.625 = R_3 = 5.25 \cdot .5$$

$$3.5 = R_4 = 7 \cdot .5$$

m/s



sec

height · width

$$A = \frac{m}{\text{sec}} \cdot \text{sec} = \boxed{m}$$

(time)
(s)

$$s(t) = t^2 - t + 3$$

(m)

$$s'(t) = v(t) =$$

(m/s)

m/s^2

$$\frac{m}{s^2} \cdot s = \frac{m}{s}$$



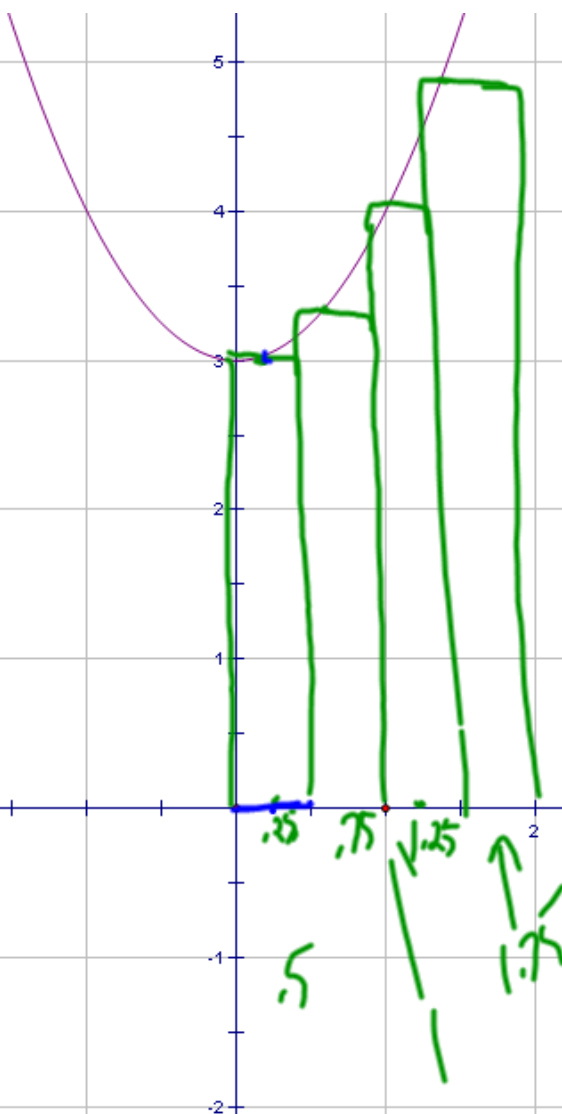
$$f(x) = x^2 + 3$$

$$f(.25)$$

$$f(.75)$$

$$f(1.25)$$

$$f(1.75)$$



$$R_1 = .5$$

$$R_2 = .5$$

$$R_3 = .5$$

$$R_4 = .5$$

$$A = 8.625$$